## CLAIMS

What is claimed is:

1. A rubber component formed from a precursor composition, the precursor composition comprising:

a first hydrogenated nitrile conjugated-diene copolymer modified by a metal salt unsaturated carboxylic acid ester, wherein the first hydrogenated nitrile conjugated-diene copolymer is derived from a first composition comprising a first ethylenically unsaturated nitrile and a first conjugated diene; and

a second hydrogenated nitrile conjugated-diene copolymer derived from a second composition comprising a second ethylenically unsaturated nitrile and a second conjugated diene,

wherein the first and second hydrogenated nitrile conjugated-diene copolymers are intermixed, and

wherein the first and second ethylenically unsaturated nitriles each comprise at least one member selected from the group consisting of acrylonitrile and methacrylonitrile.

2. The rubber component of claim 1, wherein the first and second ethylenically unsaturated nitriles are the same.

3. The rubber component of claim 1, wherein the first and second ethylenically unsaturated nitriles are different from one another.

4. The rubber component of claim 1, wherein the first and second conjugated dienes each comprise at least one member selected from the group consisting of butadiene, isoprene, dimethylbutadiene, 1,3-pentadiene, and piperylene.

5. The rubber component of claim 4, wherein the first and second conjugated dienes are the same.

6. The rubber component of claim 4, wherein the first and second conjugated dienes are different from one another.

7. The rubber component of claim 1, wherein the metal salt unsaturated carboxylic acid ester is derived from at least one ethylenically unsaturated monocarboxylic acid and at least one member selected from the group consisting of a metal and a metallic compound.

8. The rubber component of claim 7, wherein the at least one ethylenically unsaturated monocarboxylic acid comprises at least one member selected from the group consisting of acrylic acid, methacrylic acid, crotonic acid, and 3-butenic acid.

9. The rubber component of claim 1, wherein the metal salt unsaturated carboxylic acid ester is derived from at least one ethylenically unsaturated dicarboxylic acid and at least one member selected from the group consisting of a metal and a metallic compound.

10. The rubber component of claim 9, wherein the at least one ethylenically unsaturated dicarboxylic acid comprises at least one member selected from the group consisting of maleic acid, fumaric acid, and itaconic acid.

11. The rubber component of claim 1, wherein the metal salt unsaturated carboxylic acid ester comprises at least one metal salt selected from the group consisting of a salt of zinc, magnesium, calcium, and aluminum.

12. The rubber component of claim 11, wherein the metal salt unsaturated carboxylic acid ester comprises zinc dimethacrylate.

13. The rubber component of claim 1, wherein the rubber component is essentially free of silica.

14. The rubber component of claim 1, wherein carbon-carbon double bonds in each of the first and second hydrogenated nitrile conjugated-diene copolymers are hydrogenated to between about 85% and about 95% saturation.

15. The rubber component of claim 1, wherein carbon-carbon double bonds in each of the first and second hydrogenated nitrile conjugated-diene copolymers are hydrogenated to between about 90% and about 92% saturation.

16. The rubber component of claim 1, wherein the precursor composition further comprises a curing agent.

17. The rubber component of claim 16, wherein the curing agent comprises a peroxide curing agent.

18. The rubber component of claim 16, wherein the curing agent comprises 2,2'-bis(t-butylperoxy)diisopropyl benzene.

19. The rubber component of claim 16, wherein the curing agent is dispersed in a clay carrier.

20. The rubber component of claim 1, wherein the rubber component is formulated to provide an average shear strength greater than about 24,132 kPa when tested at about 21° C by single-lap shear specimens of the rubber component bonded to a graphite/fiber epoxy composite with a crosshead rate of about 0.0508 cm./min.

21. The rubber component of claim 1, wherein the rubber component is formulated to provide an average shear strength greater than about 17,237 kPa when tested at about 38° C by single-lap shear specimens of the rubber component bonded to a graphite/fiber epoxy composite with a crosshead rate of about 0.0508 cm./min.

22. The rubber component of claim 1, wherein the rubber component is formulated to provide, at about 21° C, a specific gravity between about 1.07 and about 1.14, a Shore A hardness between about 60 and about 75, a 100% modulus between about 2,413 kPa and about 5,861 kPa, a tensile strength between about 37,921 kPa and about 44,126 kPa, an elongation between about 400% and about 575%, and a tear resistance between about 1,896 kPa and about 2,586 kPa.

23. A method of making a rubber component, the method comprising:

providing a first hydrogenated nitrile conjugated-diene copolymer modified with a metal salt unsaturated carboxylic acid ester, wherein the hydrogenated nitrile conjugated-diene copolymer is derived from a first composition comprising a first ethylenically unsaturated nitrile and a first conjugated diene;

providing a second hydrogenated nitrile conjugated-diene copolymer derived from a second composition comprising a second ethylenically unsaturated nitrile and a second conjugated diene, wherein the first and second ethylenically unsaturated nitriles each comprise at least one member selected from the group consisting of acrylonitrile and methacrylonitrile; and

blending the first and second hydrogenated nitrile conjugated-diene copolymers to form a blend.

24. The method of claim 23, wherein providing first and second hydrogenated nitrile conjugated-diene copolymers comprise providing first and second hydrogenated nitrile conjugated-diene copolymers derived from first and second compositions, respectively, wherein the first ethylenically unsaturated nitrile of the first composition and the second ethylenically unsaturated nitrile of the second composition are the same.

25. The method of claim 24, wherein providing first and second hydrogenated nitrile conjugated-diene copolymers comprise providing first and second hydrogenated nitrile conjugated-diene copolymers derived from first and second compositions, respectively, wherein the first ethylenically unsaturated nitrile of the first composition and the second ethylenically unsaturated nitrile of the second composition are different from one another.

26. The method of claim 23, wherein providing first and second hydrogenated nitrile conjugated-diene copolymers comprise providing first and second hydrogenated nitrile conjugated-diene copolymers derived from first and second compositions, respectively, wherein the first and second conjugated dienes each comprise at least one member selected from the group consisting of butadiene, isoprene, dimethylbutadiene, 1,3-pentadiene, and piperylene.

27. The method of claim 26, wherein providing first and second hydrogenated nitrile conjugated-diene copolymers comprise providing first and second hydrogenated nitrile conjugated-diene copolymers derived from first and second compositions, respectively, wherein the first conjugated diene of the first composition and the second conjugated diene of the second composition are the same.

28. The method of claim 26, wherein providing first and second hydrogenated nitrile conjugated-diene copolymers comprise providing first and second hydrogenated nitrile conjugated-diene copolymers derived from first and second compositions, respectively, wherein the first conjugated diene of the first composition and the second conjugated diene of the second composition are different from one another.

29. The method of claim 23, wherein providing a first hydrogenated nitrile conjugated-diene copolymer modified with a metal salt unsaturated carboxylic acid ester comprises providing a first hydrogenated nitrile conjugated-diene copolymer modified with a metal salt unsaturated carboxylic acid ester derived from at least one ethylenically unsaturated monocarboxylic acid and at least one member selected from the group consisting of a metal and a metallic compound.

30. The method of claims 29, wherein providing a first hydrogenated nitrile conjugated-diene copolymer modified with a metal salt unsaturated carboxylic acid ester derived from at least one ethylenically unsaturated monocarboxylic acid comprises providing a first hydrogenated nitrile conjugated-diene copolymer modified with a metal salt unsaturated

carboxylic acid ester derived from at least one ethylenically monocarboxylic acid comprising at least one member selected from the group consisting of acrylic acid, methacrylic acid, crotonic acid, and 3-butenic acid.

31. The method of claim 23, wherein providing a first hydrogenated nitrile conjugated-diene copolymer modified with a metal salt unsaturated carboxylic acid ester comprises providing a first hydrogenated nitrile conjugated-diene copolymer modified with a metal salt unsaturated carboxylic acid ester derived from at least one ethylenically unsaturated dicarboxylic acid and at least one member selected from the group consisting of a metal and a metallic compound.

32. The method of claim 31, wherein providing a first hydrogenated nitrile conjugated-diene copolymer modified with a metal salt unsaturated carboxylic acid ester derived from at least one ethylenically unsaturated dicarboxylic acid comprises providing a first hydrogenated nitrile conjugated-diene copolymer modified with a metal salt unsaturated carboxylic acid ester derived from at least one ethylenically unsaturated dicarboxylic acid comprising at least one member selected from the group consisting of maleic acid, fumaric acid, and itaconic acid.

33. The method of claim 23, wherein providing a first hydrogenated nitrile conjugated-diene copolymer modified with a metal salt unsaturated carboxylic acid ester comprises providing a first hydrogenated nitrile conjugated-diene copolymer modified with a metal salt unsaturated carboxylic acid ester comprising at least one metal salt selected from the group consisting of a salt of zinc, magnesium, calcium, and aluminum.

34. A method according to claim 33, wherein providing a first hydrogenated nitrile conjugated-diene copolymer modified with a metal salt unsaturated carboxylic acid ester comprises providing a first hydrogenated nitrile conjugated-diene copolymer modified with zinc dimethacrylate.

35. The method of claim 23, further comprising forming the rubber component to be essentially free of silica.

36. The method of claim 23, wherein providing first and second hydrogenated nitrile conjugated-diene copolymers comprise providing first and second hydrogenated nitrile conjugated-diene copolymers each having carbon-carbon double bonds hydrogenated to between about 85% and about 95% saturation.

37. The method of claim 23, wherein providing first and second hydrogenated nitrile conjugated-diene copolymers comprise providing first and second hydrogenated nitrile conjugated-diene copolymers each having carbon-carbon double bonds hydrogenated to between about 90% and about 92% saturation.

38. The method of claim 23, further comprising curing the blend with a curing agent to form the rubber component.

39. The method of claim 38, wherein curing the blend with a curing agent comprises curing the blend with a peroxide curing agent.

40. The method of claim 38, wherein curing the blend with a curing agent comprises curing the blend with 2,2'-bis(t-butylperoxy)diisopropyl benzene.

41. The method of claim 38, wherein curing the blend with a curing agent comprises curing the blend with a curing agent which is dispersed in a clay carrier.

42. The method of claim 23, further comprising formulating the rubber component to provide an average shear strength greater than about 24,132 kPa when tested at about 21° C by single-lap shear specimens of the rubber component bonded to a graphite/fiber epoxy composite with a crosshead rate of about 0.0508 cm./min.

43. The method of claim 23, further comprising formulating the rubber component to provide an average shear strength greater than about 17,237 kPa when tested at about 38° C by single-lap shear specimens of the rubber component bonded to a graphite/fiber epoxy composite with a crosshead rate of about 0.0508 cm./min.

44. The method of claim 23, further comprising formulating the rubber component to provide, at about 21° C, a specific gravity between about 1.07 and about 1.14, a Shore A hardness between about 60 and about 75, a 100% modulus between about 2,413 kPa and about 5,861 kPa, a tensile strength between about 37,921 kPa and about 44,126 kPa, an elongation between about 400% and about 575%, and a tear resistance between about 1,896 kPa and about 2,586 kPa.